## Curriculum Vitae David Vladimir Budescu June 2023

#### **Professional Address**

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### **Home Address**

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#### **Personal Information**

Born on April 3, 1951, in Bucharest, Rumania. Married with 2 children

Citizenship: Israeli and US

#### Education

1975 B.A. in Psychology and Statistics, University of Haifa, Haifa, Israel.

1979 M.A. in Quantitative Psychology, University of NC at Chapel Hill.

1980 Ph.D. in Quantitative Psychology (with minor in Biostatistics), University of NC at Chapel Hill.

**M.A. Thesis:** The effect of variance stabilizing transformations on the power of the F test in the linear model. (Professor M.I. Appelbaum, Advisor).

**Ph.D. Dissertation**: The sampling distribution of Gini's mean difference and its use in statistical inference. (Professor E.M. Cramer, Advisor).

### **Professional Experience (Post Ph.D)**

Research Triangle Institute, RTP, NC

1980 - 1982 Statistician (Sampling Research and Design Center)

Department of Psychology, University of Haifa, Israel

1982 - 1984 Lecturer 1984 - 1988 Senior Lecturer

1988 - 1993 Associate Professor

Department of Psychology, University of Illinois at Urbana-Champaign, IL.

1992 - 1995 Associate Professor

1995 - 2008 Professor

Department of Psychology, Fordham University.

2008 – todate Anne Anastasi Professor of Psychometrics and Quantitative Psychology

## **Visiting and Research Appointments**

Department of Psychology, University of NC at Chapel Hill

1983 - 1987 Research Assistant Professor 1987 - 1996 Research Associate Professor

1996 - 2002 Research Professor

Department of Social and Decision Sciences, Carnegie-Mellon University, Pittsburgh

1988 - 1989 Visiting Associate Professor The Hebrew University in Jerusalem, Israel

1994 Lady Davis Visiting Professor at the Center for Advanced Studies

Davidson Faculty of Industrial & Management Engineering, Technion, Haifa, Israel

1997 Visiting Professor

Department of Psychology, Göteborg University Göteborg, Sweden 2001 Waern Visiting Professor of Social Sciences

Kellogg School of Management, Northwestern University, Evanston

2004 Visiting Scholar

Department of Statistics, University of Illinois at Urbana-Champaign

2003-2008 Professor (courtesy appointment)

INSEAD Business School, Fontainebleau, France and Singapore.

2013 Visiting Professor

Center for Environmental Decisions, Earth Institute Columbia University

2015 Adjunct Senior Research Scholar

Center for Adaptive Rationality at the Max Planck Institute, Berlin

2018 Visiting Researcher

#### **Other Professional Activities**

#### **Elected Positions in Professional Societies**

- President of the SJDM, the Society for Judgment and Decision Making (2000-2001)
- Member of the Executive Board of the SJDM, the Society for Judgment and Decision Making (Elected in 1999 for a term of 3 years)
- Member of the Executive Board of EADM, the European Association of Decision Making (Elected in 1999 for a term of 3 years)
- Fellow of the Association of Psychological Sciences (since 2003)
- Member of the Society of Multivariate Experimental Psychologists (elected in 2005)
- Fellow of the Psychonomic Society
- Fellow of Division 5 of the American Psychological Association (since 2017)

## **Editorial and Reviewing Activities**

#### **Professional Journals**

- Editor of Decision (from 2019)
- Associate Editor of Decision Analysis (2010 2017), Psychological Methods (2011 2013)
- Member of editorial boards of American Psychologist (2016-2018), Applied Psychological Measurement, Journal of Behavioral Decision Making, Journal of Mathematical Psychology, Journal of Experimental Psychology: Learning, Memory & Cognition (2000-2003); Multivariate Behavioral Research (2006-2017), Organizational Behavior and Human Decision Processes (1992-2002), Psychological Methods (1996-2000; 2010-)
- Guest Editor (with Drs. Ido Erev and Thomas S. Wallsten) of a special issue of the Journal of Behavioral Decision Making on "Stochastic and Cognitive Models of Confidence", 1997
- Guest Editor (with Drs. Ido Erev, Tamar Kuller and Rami Zwick) of special issue of Experimental Economics in Memoty of Amnon Raoport. 2023.
- Review of manuscripts for: Acta Psychologica, American Journal of Psychology, American Political Science Review, American Psychologist, American Statistician, Applied Psychology, Applied Cognitive Psychology, Basic & Applied Social Psychology, British Journal of Mathematical and Statistical Psychology, Bulletin of the American Meteorological Society, Cognitive Science, Computational Brain and Behavior, Cognition, Computational Brain and Behavior, Decision, Decision Analysis, Environment & Behavior, Environmental Communication, Ergonomics, Experimental Psychology, European Journal of Operations Research, Global Environmental Change, Group Processes and Intergroup Relations, IEEE Transactions Systems, Man and Cybernetics: Systems, International Journal of Approximate Reasoning, International Journal of the Commons, International Journal of Forecasting, Journal of the American Statistical Association, Journal of Economic Psychology, Journal of Educational and Behavioral Statistics, Journal of Environmental Psychology, Journal of Experimental Psychology (Applied, General, HPP, LMC), Journal of Applied Social Psychology, Journal of Applied Research in Memory and Cognition, Journal of Marriage and Family, Journal of Personality & Social Psychology, Journal of Social and Political Psychology, Journal of Risk and Uncertainty, Journal of Risk Research, Judgment and Decision Making, Management Science, Memory and Cognition, Multi-Criteria Decision Analysis, Nature, Nature Climate Change, Operation Research, Organizational Research

Methods, Personality & Social Psychology Bulletin, Perspectives on Psychological Science, PLOS - Computational Biology and Psychology, Proceedings of the National Academy of Science, Philosophical Psychology, Psychological Assessment, Psychological Bulletin, Psychological Research, Psychological Review, Psychological Science, Psychometrika, Psychophysiology, research Policy, Risk Analysis, Science, Science Progress, Scientific Reports, Weather Climate and Society, WIREs Climate Change, WIREs Cognitive Science.

#### **Funding Agencies**

- Member of the Decision, Risk and Management Science (DRMS) NSF review panel (2001-2003)
- Member of the Methodology, Measurement and Statistics (MMS) NSF review panel (2005-2007)
- Member of the Committee of Visitors for the evaluation of the Social and Economic Sciences (SES)
   Divison of the National Science Foundation (NSF) (2013)
- Member of the Methodology and Measurement in the Behavioral and Social Sciences (NIH) review panel (2009)
- Review of research proposals for: National Science Foundation (NSF), National Institute for Mental Health (NIMH), U.S.-Israel Bi-National Science Foundation (BSF), The Basic Research Fund of the Israeli Academy of Science and Humanities, Israel Foundation Trustees, The National Council of Measurement in Education (NCME), Natural Sciences and Engineering Research Council of Canada (NSERC), Netherlands Organization for Scientific Research, Research Grant Council of Hong Kong, Swiss National Science Foundation, University of Illinois Research Board.

### **National Agencies**

- Review of report for the National Research Council of the National Academies.
- Review of research proposal for the Office of the Director of National Intelligence

## **International Agencies**

• Review of programs for the Max Planck Institute (Germany)

#### **Publishers**

• Review of book and journal proposals for: Cambridge University Press, Erlbaum, Oxford University Press, Sage, Wiley.

#### **Professional Conferences**

• Review of proposals for periodical meetings of The National Council of Measurement in Education (NCME), American Psychological Association (Division 5).

## **Professional Competitions**

- Member of jury for the deFinetti prize for young researchers in 2001 and 2003 (Competition organized by the European Association for Decision Making).
- Member of jury for the best publication in Decision Analysis in 2012 (Competition organized by the Decision Analysis Society).
- Member of the jury of the 2015 Exeter Prize for the best publication in Decision Sciences.

## **Special Committees**

• Member of the committee "Advancing Social and Behavioral Science Research and Application within the Weather Enterprise" appointed by the National Academy of Sciences (2016-2017).

## Organization of Conferences and Symposia

- Co-organizer of the symposium on "The representation and the role of ambiguity in judgment and individual decision making" at the annual meeting of the Society for Judgment and Decision Making, New Orleans, LA, 1986.
- Chairman of the organizing committee of the 2nd Israeli Conference on Judgment and Decision-Making, Haifa, 1987.
- Member of the organizing committee of the 4th Israeli Conference on Judgment and Decision-Making, Beer Sheba, 1990.

- Member of the organizing committee of SPUDM (Conference on Subjective Probability Utility and Decision-Making) 15, Jerusalem, 1995.
- Co-organizer of the symposium on "Overconfidence: Sources, implications and solutions" at SPUDM (Subjective Probability, Utility and Decision Making) 15, Jerusalem, 1995.
- Co-organizer of the workshop on "Games and Human Behavior" at the 29th annual meeting of the Society for Mathematical Psychology, Chapel Hill, NC, 1996.
- Co-organizer of the workshop on "Conflict Resolution and Negotiations" at the Davidson School of Industrial Engineering and Management, Technion, Haifa, Israel, December 1997.
- Member of the organizing committee of the joint meeting of the Psychometric Society and the Classification Society of North America, Champaign, IL, 1998.
- Member of the organizing committee of the annual meeting of the Society for Judgment and Decision-Making, Dallas, TX, 1998.
- Member of the organizing committee of the International Congress on Social Dilemmas, Zichron Yaakov, Israel, 1999
- Head of the organizing committee of the annual meeting of the Society for Judgment and Decision-Making, Los Angeles, CA, 1999.
- Organizer of the symposium "A judgement and decision making perspective on performance in multiple choice tests" at the annual meeting of the National Council on Measurement in Education, New Orleans, LA, 2000.
- Member of the organizing committee of the annual meeting of the Society for Judgment and Decision-Making, New Orleans, LA, 2000.
- Member of the program committee of the Second International Symposium on Imprecise Probabilities and Their Applications (ISIPTA '01), Cornell University, Ithaca, NY, July 2001.
- Organizer of special symposium on "Giving, interpreting and taking advice" at the 16<sup>th</sup> triennial conference of the International Federation of Operational Research Societies IFORS). Edinburgh, Scotland, 2002.
- Member of the program committee of the Third International Symposium on Imprecise Probabilities and Their Applications (ISIPTA '03), Lugano, Switzerland, 2003.
- Member of the organizing committee of SPUDM (Conference on Subjective Probability Utility and Decision-Making) 19, Zurich, Switzerland, 2003.
- Co-organizer (with Thomas Wallsten and Robert Sorkin) of the workshop "Information aggregation in decision-making", Silver Spring, MD, May 2003.
- Organizer of special symposium in memory of Janet Sniezek at the annual meeting of the Society of Judgment and Decision Making, Vancouver, BC, November 2003.
- Member of the International Scientific Committee of the FUR XI (Foundations and Applications of Utility, Risk and Decision Theory) Conference, Paris, July 2004.
- Co-organizer (with Prof. Ali Abbas) of the First workshop on Decision Research at UIUC. February 2006.
- Co-organizer (with Drs. Elke Weber and Dave Krantz) of symposium on "Decision making under climate uncertainty: Theoretical issues and empirical results" at the annual meeting of the Society of Judgment and Decision Making, Long Beach, CA, November 2007.
- Co-organizer (with Dr. Ali Abbas) of two invited sessions on "Elicitation of probability and utility" at the annual meeting of INFORMS, Washington DC, October 2008.
- Co-organizer (with Drs. Boris Maciejovky and Matthias Sutter) of symposium on "Do teams make better decisions than individuals?" at the annual meeting of the Society of Judgment and Decision Making, St Louis, MO, November 2010.
- Co-organizer (with Drs. Boris Maciejovky and Tamar Kugler) of symposium on "Group decision making" at the International Conference Behavioral Decision Making, Herzliya, Israel, June 2011.
- Organizer of the symposium "A closer look at the "wisdom of crowds": New theoretical results and empirical findings, at the Annual Meeting of the Association of Psychological Sciences (APS), Chicago, May 2012.
- Co-organizer of the First Conference of Cognitive and Decisions Science. University of Maryland, June 2012.

- Organizer of the symposium "A cross-national study of uncertainty and perceptions of Global Climate Change" at Subjective Probability, Utility and Decision Making (SPUDM), Barcelona 2013.
- Member of the scientific steering committee for the 2015 International Facet Theory Conference, New York, 2015.
- Co-organizer of the symposium "Psychological Responses to Climate Change" at the Annual Meeting of the Association of Psychological Sciences (APS), New York, May 2015.
- Member of the organizing committee of SPUDM (Conference on Subjective Probability Utility and Decision-Making) 26, Haifa 2017.
- Organizer of the symposium "Psychological Research on Climate Change" at SPUDM (Conference on Subjective Probability Utility and Decision-Making) 26, Haifa 2017.
- Co-organizer of the 2018 Psychonomic Society Collaborative Symposium "Advances in Information Aggregation and Collective Intelligence Research" at the Annual Meeting of the Japanese Society for Cognitive Psychology (JSCP) September 2018, Osaka, Japan

# **Membership in Professional Organizations**

American Psychological Association - Fellow

Association of Psychological Sciences – Fellow

American Statistical Association - Member

Behavioral Science and Public Policy Association - Member

European Association for Decision Making – Member (Past Member of the Executive Board)

Economic Sciences Association - Member

Institute for Operations Research and Management Science (INFORMS) - Member

Decision Analysis Society (DAS) - Member

National Council of Measurement in Education - Member

Psychonomic Society - Fellow

Psychometric Society – Member

Society of Judgment and Decision Making - Member (Past President)

## Special Recognitions and Awards (Post Ph.D.)

1982 - 1985 Recipient of the Yigal Alon Fellowship for young scientists.

1984 - 1987 Bergmann Memorial Research Grant from the US-Israel Bi-National Science Foundation.

1993 Arnold O. Beckman Research Award (from the University of Illinois Research Board).

Member of the group "Psychological, Philosophical and Economic Aspects of Rationality"

Sponsored by the Institute for Advanced Studies and the Center for the Study of Rationality at the Hebrew University.

1999-2002 Elected member of the Executive Board of the European Association for Decision Making.

1999-2002 Elected member of the Executive Board of the Society of Judgment and Decision Making.

2000-2001 President of the Society of Judgment and Decision Making

Fellow of the American Psychological Society

2005 Member of the Society of Multivariate Experimental Psychologists

2006 Recipient of Alumni Discretionary Award from the College of Liberal Arts and Sciences at the University of Illinois.

Inaugural Anne Anastasi Professor of Psychometric and Quantitative Psychology at Fordham University.

Fellow of Division 5 of the American Psychological Association.

2014 Co-Winner (with Dr. Boris Maciejovsky) of APA Division 21 Raymond S. Nickerson Award for Best 2013 Paper in the **Journal of Experimental Psychology: Applied** for the paper "Verbal and Numerical Consumer Recommendations: Switching Between Recommendation Formats Leads to Preference Inconsistencies".

Co-Winner (with Dr. Mia Budescu) of the First Prize in the competition for **Best Empirically Based Idea for Detection of Bias in Peer Review** in NIH-CSR's America COMPETES Act Challenge competition.

Winner of the fifth annual Exeter Prize for the most outstanding article published in a refereed journal in 2015 in the fields of Experimental Economics, Decision Theory and

	<b>Behavioral Economics</b> for the paper "Identifying Expertise to Extract the Wisdom of Crowds"
	With Dr. Eva Chen).
2017	Selected as UNC-CH Psychology Department Distinguished Alum.
2019	Co-Winner (with Drs. Yuyu Fan, David Mandel, and Mark Himmelstein) of the <b>2019 Decision</b>
	Analysis Special Recognition Award for the paper "Improving Accuracy by Coherence
	Weighting of Direct and Ratio Probability Judgments" published in the September 2019 issue.
2021	Winner of the 2021 Distinguished Research Award in the Social Sciences, Fordham
	University.
2021	Runner up (with Dr. Yuyu Fan, David Mandel, and Mark Himmelstein) of the <b>2021 Decision</b>
	Analysis Best Publication Award for the paper "Improving Accuracy by Coherence
	Weighting of Direct and Ratio Probability Judgments."
2022-2023	<b>8</b> • <b>9</b>
2023	Frank Ramsey medal of the Decision Analysis Society.
University and Department Couries (University of Heife Doutiel list)	
University and Department Services (University of Haifa Partial list) 1984 - 1987 Chairman of the Professional Committee of the National Admission Test to Graduate Studies	
1904 - 190	in Psychology
1085 1089	Member of the University's Research Administration Council
	6 Academic Advisor to the University's Admission Committee
	8, 1991-1992 Head of the Institute of Information Processing and Decision Making (IIPDM)
	Chairman, Department of Psychology
	2 Member of the Faculty Senate
	2 Faculty Representative to the Board of Governors
1770 1772	Theatify Representative to the Bould of Governors

#### **University and Department Services (University of Illinois --- Partial list)**

- 1992 1993 Department Representative on the Advisory Committee of the Social Science Quantitative Laboratory (SSQL)
- 1993 1995 Member of the Oversight Committee for the Office of Computing and Communication for the Social Sciences
- 1993 1995 Member of Departmental Graduate Admission Committee
- 1994 1966 Member of the Nancy Hirschberg Research Award for Graduate Students
- 1994 1995 Head of joint committee on the Decision Sciences Program (Psychology Commerce)
- 1995 1996 Member of Social Psychology Search Committee
- 1995 Member of Department Head Search Committee
- 1995 1996 Member of Departmental Graduate Education Committee
- 1995 1997 Member of the LAS Committee on Courses and Curriculum
- 1995 1996 Member of Departmental Graduate Award Committee
- 1996 1997 Member of Departmental Human Subjects Committee
- 1996 1997 Member of Social Psychology Search Committee
- 1998 1999 Member of Quantitative Psychology Search Committee
- 1998 1999 Member of Departmental Graduate Admission Committee
- 1999 2000 Member of Departmental Graduate Award Committee
- 1999 2000 Member of Social Psychology Search Committee
- 1999 2003 Coordinator of the Quantitative Division and Member of Department's Advisory Committee
- 1999 2001 Member of UIUC Faculty Senate
- 1999 2001 Member of the Committee on Faculty Benefits of the UIUC Faculty Senate
- 2002 2003 Head of Quantitative Psychology Search Committee
- 2002 2003 Member of Departmental Graduate Award Committee
- 2004 2006 Member of the Graduate College Executive Committee
- 2004 2005 Coordinator of the Quantitative Division and Member of Department's Advisory Committee
- 2004 2005 Head of Quantitative Psychology Search Committee
- 2005 Member of the Evaluation Committee of Dean of the Graduate School
- 2006 Member of the Social Psychology Search Committee
- 2006 Member of the UIUC Advisory Committee NRC Assessment of Graduate Schools
- 2007 2009 Member of the Executive Committee of the College of Liberal Arts and Sciences

### **Research Grants and Contracts**

- Principal Investigator on the grant "Comparison of ratio scaling methods" awarded by the Faculty of Social Sciences at the University of Haifa.
- 1983 1987 Co-Principal Investigator (with T. S Wallsten, A. Rapoport and S. Fillenbaum) on contract "Meaning of non-numerical probability phrases" from the U.S. Army Research Institute for the Behavioral and Social Sciences.
- 1983 1985 Principal Investigator on the grant "Subjective judgment and perception of randomness" awarded by the Basic Research Foundation of the Israeli Academy of Sciences and Humanities.
- 1984 1987 Principal Investigator (T. S. Wallsten, Co-PI) on the grant "Non-numerical judgments of subjective probabilities" awarded by the U.S.-Israel Bi-National Science Foundation.
- 1986 1989 Co-Principal Investigator (with T. S. Wallsten and A. Rapoport) on the grant "Judgment and choice on the basis of linguistic or vague information" awarded by the U.S. National Science Foundation.
- 1987 1989 Co-Principal Investigator (with E. Weg and R.Suleiman) on the grant "Social dilemmas with random resources" awarded by the Basic Research Foundation of the Israeli Academy of Sciences and Humanities.
- 1989 1992 Co-Principal Investigator (with T. S.Wallsten) on the grant "Combining and using vague and precise information for decision making", awarded by the U.S. National Science Foundation.
- 1990 1992 Principal Investigator (with M. Bar-Hillel) on the grant "The effect of outcome desirability on its judged probability", awarded by the Israel Foundation Trustees.
- 1991 1992 Co-Principal Investigator (with A. Rapoport and R. Suleiman) on the grant "Social dilemmas with uncertain resources" awarded by the U.S. National Science Foundation.
- 1991 1992 Principal Investigator (With Y. Cohen and A. Ben-Simon) on the grant "A revised modified parallel analysis (RMPA) for the construction of unidimensional item pools" awarded by the U.S. Office of Naval Research.
- 1993 1994 Principal Investigator (with T. S. Wallsten) on the grant "Probabilistic judgments with multidimensional correlated evidence" awarded by the Research Board of the University of Illinois.
- 1992 1995 Co-Principal Investigator (with A. Rapoport and R. Suleiman) on the grant "Resource dilemmas: Sequential and simultaneous requests" awarded by the U.S. National Science Foundation.
- 1995 1996 Principal Investigator on the grant "The relative importance of precision of probabilities and outcomes in judgment and decision making" awarded by the Research Board of the University of Illinois.
- 1996 1999 Principal Investigator on the Collaborative Grant "Understanding, improving and aggregating subjective judgments" awarded by the U.S. National Science Foundation (Collaborator: T. S. Wallsten, UNC).
- 1999 2002 Principal Investigator on the Collaborative Grant "Basic and applied research leading to a Linguistic Probability Translator (LPT)" awarded by the U.S. National Science Foundation (Collaborator: T. S. Wallsten, UNC).
- 1999 2000 Principal Investigator on the grant "Aggregation of opinions: The effects of asymmetry and computer mediated groups" awarded by the Research Board of the University of Illinois.
- 2002 2006 Co-Principal Investigator (E. Yairi, PI) on the multi-site grant "Subtypes and associated risk factors in stuttering" awarded by the National Institute of Health.
- 2003 2003 Principal Investigator on the grant "Valuation of vague prospects with mixed outcomes" awarded by the Research Board of the University of Illinois.
- 2003 2006 Principal Investigator on the grant "Aggregation of probabilistic opinions" awarded by the U.S. National Science Foundation.
- 2003 Co-recipient (with T. S. Wallsten) of grants from the USAir Force Office of Scientific Research, the National Science Foundation, and the European Association for Decision Making for the workshop "Information aggregation in decision-making", Silver Spring, MD, May 2003.
- 2004 2009 Co-Principal Investigator (R. Lempert, PI) on the grant "RAND Center for decision making under deep uncertainty", awarded by the U.S. National Science Foundation.

- 2006 2009 Co-Principal Investigator (A. Abbas, PI) on the grant "Assessing joint probability distributions with isoprobability contours" awarded by the U.S. National Science Foundation.
- Co-Principal Investigator (H.H. Por and S, Broomell Co-PI) on the grant "Communicating Uncertainty in the Reports of the Intergovernmental Panel on Climate Change" awarded by Time-sharing Experiments for the Social Sciences (TESS) (Funded by the U.S. National Science Foundation).
- 2011 2014 Co-Principal Investigator (Dr. Dirk Warnaar from Applied Research Associates, PI) on the contract "Aggregative Contingent Estimation System (ACES)" awarded by the Intelligence Advanced Research Projects Activity (IARPA) via the Department of Interior National Business Center.
- 2010 2013 Co-Principal Investigator (B. Maciejovsky, PI) on the grant "Can competition increase information sharing in groups?" awarded by the U.K. Economic and Social Research Council.
- 2011 2014 Co-Principal Investigator (R. Lempert, PI) on the grant "Informing Climate-Related Decisions with Earth Systems Models" awarded by the U.S. National Science Foundation.
- 2011 2013 Principal Investigator on the grant "Communication of uncertainty in the IPCC: A comparative international study" awarded by the U.S. National Science Foundation.
- 2015 2018 Co-Principal Investigator (Michael Smithson, PI) on the grant "Judgments and decisions under ambiguity and conflict" awarded by the Australian Research Council.
- 2015 2016 Co Principal Investigator (with Daniel Benjamin) on the DDRIG grant "The coupled impact of conflict and imprecision: Resolving competing sources of uncertainty from multiple forecasts" awarded by the U.S. National Science Foundation.
- 2016 2020 Co Principal Investigator (with Drs. Judith Avrahami and Yaakov Kareev) on the grant "The sustainability game: Inducing and fostering environmentally responsible behavior" awarded by the U.S. Israel Bi-National Science Foundation.
- Co Principal Investigator (with Dr. Esther Kaufman) on the research grant "Do teachers consider advice? An experimental investigation of the acceptance of expert models within the educational field" awarded by the Swiss National Foundation.
- 2017 2021 Co-Principal Investigator (Dr. Aram Galysan, USC, PI) on the contract SAGE: Synergistic Anticipation of Geopolitical Events awarded by the Intelligence Advanced Research Projects Activity (IARPA).
- 2019 2020 Co Principal Investigator (with Emily Ho) on the DDRIG grant "Developing and validating a method of coherence-based judgement aggregation" awarded by the U.S. National Science Foundation.
- 2023 2024 Co Principal Investigator (with Mark Himmelstein) on the DDRIG grant "Measuring persuasion without measuring prior beliefs" awarded by the U.S. National Science Foundation.

# Publications (listed in chronological order)

#### **Edited Books**

- 1. Budescu, D.V., Erev, I., & Zwick, R. (Eds.) <u>Games and Human Behavior: Essays in Honor of Amnon Rapoport</u>. 1999 (Lawrence Earlbaum Associates).
- Suleiman, R., Budescu, D.V., Fischer, I. & Messick, D. (Eds.) <u>Contemporary Psychological Research on Social Dilemmas</u>. 2004 (Cambridge University Press).
- Integrating Social and Behavioral Sciences within the Weather Enterprise. Final Report of Committee on Advancing Social and Behavioral Science Research and Application within the Weather Enterprise. October 2017.

## **Papers in Refereed Journals** (\*) Also appeared as a chapter in edited book

- 1. Budescu, D.V. Some new measures of profile dissimilarity. <u>Applied Psychological Measurement</u>, 1980, <u>4</u>, 261-272.
- 2. Budescu, D.V. Approximate confidence intervals for a robust scale parameter. <u>Psychometrika</u>, 1980, <u>45</u>, 397-402.
- Budescu, D.V. A note on polynomial regression. <u>Multivariate Behavioral Research</u>, 1980, <u>15</u>, 497-508.
- 4. Budescu, D.V. & Rodgers, J.L. Corrections for spurious influences on correlations between MMPI scales. <u>Multivariate Behavioral Research</u>, 1981, <u>16</u>, 483-497.
- 5. Budescu, D.V. & Appelbaum, M.I. Variance stabilizing transformations and the power of the F test Journal of Educational Statistics, 1981, 6, 55-74.
- 6. Wallsten, T.S. & Budescu, D.V. Additivity and nonadditivity in judging MMPI profiles. <u>Journal</u> of Experimental Psychology: Human Perception and Performance, 1981, 7, 1096-1109.
- 7. Budescu, D.V. The power of the F test in normal populations with heterogeneous variances. Educational and Psychological Measurement, 1982, 42, 409-416.
- 8. Wallsten, T.S. & Budescu, D.V. Encoding subjective probabilities: A psychological and psychometric review. <u>Management Science</u>, 1983, <u>29</u>, 151-173.
- 9. Wallsten, T.S., Forsyth, B. & Budescu, D.V. Stability and coherence of health experts' upper and lower subjective probabilities about dose-response curves. <u>Organizational Behavior and Human Decision Processes</u>, 1983, 31, 277-302.
- 10. Budescu, D.V. The estimation of factor indeterminacy. <u>Educational and Psychological</u> Measurement, 1983, 43, 971-976.
- 11. Kalsbeek, W.D., Mendoza, O.M. & Budescu, D.V. Cost models for optimum allocation in multistage sampling. <u>Survey Methodology Journal</u>, 1983, <u>9</u>, 154-177.
- 12. Budescu, D.V. Scaling binary comparison matrices: A comment on Narasimhan's proposal. <u>Fuzzy Sets and Systems</u>, 1984, <u>14</u>, 187-192.
- 13. Budescu, D.V. Tests of lagged dominance in sequential dyadic interaction. <u>Psychological Bulletin</u>, 1984, <u>96</u>, 402-414.
- 14. Budescu, D.V. Analysis of dichotomous variables in the presence of serial dependence. <u>Psychological Bulletin</u>, 1985, <u>97</u>, 547-561.
- 15. Budescu, D.V. Efficiency of linear equating as a function of the length of the anchor test. <u>Journal of Educational Measurement</u>, 1985, <u>22</u>, 13-20.
- 16. Budescu, D.V. & Nevo, B. Optimal number of options: An investigation of the assumption of proportionality. <u>Journal of Educational Measurement</u>, 1985, <u>22</u>, 183-196.
- 17. Budescu, D.V. & Wallsten, T.S. Consistency in interpretation of probability phrases. Organizational Behavior and Human Decision Processes, 1985, 36, 391-405.
- 18. Wallsten, T.S., Budescu, D.V., Rapoport, A, Zwick R. & Forsyth, B. Measuring the vague meaning of probability terms. <u>Journal of Experimental Psychology: General</u>, 1986, <u>115</u>, 348-365.
- 19. Budescu, D.V., Zwick, R., & Rapoport, A. A comparison of the eigenvalue method and the geometric mean procedure for ratio scaling. <u>Applied Psychological Measurement</u>, 1986, <u>10</u>, 69-78.
- 20. Budescu, D.V., & Weiss, W. Reflection of transitive and intransitive preferences: A test of prospect theory. Organizational Behavior and Human Decision Processes, 1987, 39, 184-195.
- 21. Budescu, D.V. A Markov model for generation of binary random series. <u>Journal of Experimental Psychology: Human Perception and Performance</u>, 1987, <u>13</u>, 25-39.

- 22. Budescu, D.V. Selecting an equating method: Linear or equipercentile? <u>Journal of Educational Statistics</u>, 1987, <u>12</u>, 33-43.
- 23. Zwick, R., Carlstein, E., & Budescu, D.V. Measures of similarity between fuzzy concepts: A comparative analysis. <a href="International Journal of Approximate Reasoning">International Journal of Approximate Reasoning</a>, 1987, 1, 221-242.
- 24. Budescu, D.V. On the feasibility of multiple matching tests: Variations on a theme by Gulliksen. Applied Psychological Measurement, 1988, 12, 5-14.
- 25. Wallsten, T.S., Budescu, D.V., & Erev, I. Understanding and using linguistic uncertainties. <u>Acta Psychologica</u>, 1988, <u>68</u>, 39-52.(\*)
- Budescu, D.V., Weinberg, S., & Wallsten, T.S. Decisions based on numerically and verbally expressed uncertainties. <u>Journal of Experimental Psychology: Human Perception and Performance</u>, 1988, <u>14</u>, 281-294.
- 27. Yaffe-Katz, A., Budescu, D.V. & Wallsten, T.S. Magnitude comparisons of numerical and nonnumerical expressions of uncertainty. Memory and Cognition, 1989, 17, 249-264.
- 28. Wallsten, T.S. & Budescu, D.V. Comment on "Quantifying probabilistic expressions" (By Mosteller & Youtz). <u>Statistical Sciences</u>, 1990, <u>5</u>, 23-26.
- 29. Budescu, D.V. & Wallsten, T.S. Dyadic decisions with numeric and verbal probabilities. Organizational Behavior and Human Decision Processes, 1990, 46, 240-263.
- 30. Budescu, D.V., Rapoport, A. & Suleiman, R. Resource dilemmas with environmental uncertainty and asymmetric players. European Journal of Social Psychology, 1990, 20, 475-488.
- 31. Budescu, D.V., Zwick, R., Wallsten, T.S. & Erev I. An empirical study of information integration. International Journal of Man Machine Studies, 1990, 33, 657-676.
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#### Abstracts

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#### Papers Submitted for Peer Review

- Feng, Y.. & Budescu, D.V. Using selected peers to improve the accuracy of crowd sourced forecasts.
- Rabinovitch, H, Bereby-Meyer, Y. & Budescu, D.V. Effective but unappreciated: Algorithms can improve selection decisions, yet people don't value them
- Budescu, D.V. & Fan, Y. Estimating subjective probabilities using the ratio judgment and scaling (RJS) method.
- Ho. E., Budescu, D.V & Himmelstein, M. A measure of probabilistic coherence to identify superior forecasters.

## **Unpublished Working Papers**

- Attali-Ariely, M. & Budescu. D.V. Engagement in assessment: How to make test takers exert
  effort even when test scored do not count
- Bo, Y., Budescu, D.V., & Lewis. C. Empirical tests of option-based partial credit models in multiple-selection multiple-choice tests.
- Budescu, D.V, & Park, S. Subjective prediction intervals for events involving internal and external sources of uncertainty.
- Karelitz, T. Budescu. D.V. Thinking outside the box: Evaluating classification agreement in rectangular contingency matrices.
- Sakworawich, A., Por, H., Budescu, D.V. & von Davier, A. Selecting loglinear smoothing models using criticality analysis.

### **Chapters in Edited Books**

- (\*) Also appeared as paper in refereed journal
- Budescu, D.V. Self-evaluation of success in psychological testing. In B. Nevo & R. Jager, R.S.(Eds.), <u>Psychological Testing: The Examinee Perspective.</u> Gottingen: Sonderdruck, 1986, pp. 69-91.
- 2. Budescu, D.V., & Wallsten, T.S. Subjective estimation based on precise and vague uncertainties. In G. Wright & P. Ayton (Eds.) <u>Judgmental Forecasting.</u> N.Y.: Wiley, 1987, pp. 63-92.
- 3. Zwick, R., Budescu, D.V., & Win pressallsten, T.S. An empirical study of the integration of linguistic probabilities. In T. Zeteny (Ed.) <u>Fuzzy Sets in Psychology</u>. Amsterdam: North Holland, 1988, pp. 91-125.
- 4. Wallsten, T.S., Budescu, D.V., & Erev, I. Understanding and using linguistic uncertainties. In B. Rohrman, L.R. Beach, C. Vlek & S.R. Watson (Eds.) <u>Advances in Decision Research.</u> 1989, North Holland, 1989, pp. 39-52. (\*)
- 5. Rapoport, A., Budescu, D.V., Suleiman, R. & Weg, E. Social dilemmas with uniformly distributed resources. In W.G. Liebrand, D.M. Messick & H. A.M. Wilke (Eds.) <u>Social Dilemmas:</u> Theoretical Issues and Research Findings. Pergamon Press, 1992, pp. 41-55.
- 6. Budescu, D.V., Rapoport, A. & Suleiman, R. Simultaneous vs. sequential requests in resource dilemmas with incomplete information. In O. Huber, J. Mumpower, J.van der Pligt & P. Koele (Eds.) <u>Current Themes in Psychological Decision Research</u>. North Holland, 1992, p. 297 310. (\*)
- 7. Budescu, D.V. Self-evaluation of success in psychological testing. In B.Nevo & R. Jager, R.S.(Eds.) <u>Educational and Psychological Testing: The Test Taker's Outlook</u>. Toronto: Hogrefe & Huber Publishers, 1993, pp. 153-176.
- 8. Suleiman, R., Budescu, D.V. & Rapoport, A., Positional order effects in resource dilemma games. In U. Schulz, W. Albers & U. Mueller (Eds.) <u>Social Dilemmas and Cooperation</u>. Springer-Verlag, Heidelberg, 1994, pp. 55-73.

- 9. Fischer, I., & Budescu, D.V. Desirability and hindsight biases in predicting results of a multi-party election. In J.P. Caverni, M. Bar-Hillel, H.F. Barron, & H. Jungermann (Eds.) <u>Contributions to</u> Decision Research I. Elsevier Science Publishers B.V., North Holland, 1995, pp. 185-203.
- Budescu, D.V. & Wallsten, T.S. Processing linguistic probabilities: General principles and empirical evidence. In J.R. Busemeyer, R. Hastie & D. Medin (Eds.) <u>The Psychology of Learning</u> <u>and Motivation: Decision Making from the Perspective of Cognitive Psychology</u>. Academic Press, 1995, 275-318.
- 11. Suleiman, R., Rapoport, A. & Budescu, D.V. Fixed position and property rights in sequential resource dilemmas under uncertainty. In R. Beyth Marom, P. Ayton, J. Beattie & P. Keole (Eds.) Contributions to Decision Research II. Elsevier Science, 1996, 229-245. (\*)
- 12. Wallsten, T.S., Budescu, D.V. & Tsao, C.J. Combining linguistic probabilities. In R.W. Scholz & A.C. Zimmer (Eds.) Qualitative Aspects of Decision Making. 1997, Pabst Science Publishers, 27-55. (\*)
- 13. Suleiman, R., Rapoport, A., & Budescu. D.V. Testing the equilibrium solution for resource dilemmas under uncertainty. In E. T. Loehman & D. M. Kilgour (Eds.) <u>Designing Institutions for Environmental and Resource Management</u>. Edward Elgar, 1998, 339-355.
- 14. Zwick, R., Erev, I., & Budescu. D.V. The psychological and economical perspective on the study of human decisions in social and interactive contexts. In D.V. Budescu, I. Erev, & R. Zwick (Eds.) Games and Human Behavior, LEA, 1999, 3-20.
- 15. Suleiman, R., & Budescu, D.V. Common pool resource dilemmas with incomplete information. In D.V. Budescu, I. Erev, & R. Zwick (Eds.) <u>Games and Human Behavior</u>, LEA, 1999, 387-410.
- Au, W.& Budescu, D.V. Sequential effects in give-some and take-some social dilemmas. In M. Foddy, M. Smithon, S. Schneider & M. Hogg (Eds.) <u>Resolving Social Dilemmas: Dynamic, Structural and Intergroup Aspects.</u> Psychological Press, 1999, 87-99.
- 17. VanDijk, E., Wit, A., Wilke, H., & Budescu, D.V. What we know (and do not know) about the effects of uncertainty on behavior in social dilemmas. In Suleiman, R., Budescu, D.V., Fischer, I. & Messick, D. (Eds.) Contemporary Psychological Research on Social Dilemmas. Cambridge University Press, 2004, 315-331.
- 18. Kramer, K.M. & Budescu, D.V. Exploring Ellsberg's paradox in vague-vague cases. In Zwick, R. & Rapoport. A. (Eds.) <u>Experimental Business Research, Volume III.</u> Kluwer Academic Publishers: Norwell, MA and Dordrecht, The Netherlands, 2005, 131-154.
- Viechtbauer, W., & Budescu, D.V. A model selection approach to testing dependent ICCs: Comments on Cohen & Doveh. In F. Dansereau and F. Yammarino (Eds.) <u>Multi-Level Issues in Strategy and Methods (Volume 4 in Research in Muti-Level Issues)</u>. Amsterdam, JAI Press, Elsevier, 2005, 433-454.
- Budescu, D.V. Confidence in aggregation of opinions from multiple sources. In K. Fiedler & P. Juslin (Eds.) <u>Information Sampling and Adaptive Cognition.</u> Cambridge University Press, 2006, 327-352.
- 21. Bar-Hillel, M., Budescu, D.V., & Amar. M. Wishful thinking in predicting World Cup results: Still elusive. In (J. Kruger, Ed.). <u>Rationality and Social Responsibility: Essays in Honor of Robyn</u> Mason Dawes (Modern Pioneers in Psychological Science: an APS-LEA series), 2008, 175-186.
- 22. Budescu, D.V. & Templin, S. Valuation of vague prospects with mixed outcomes. In T. Kugler, J. Cole Smith, T. Connolly, and Y.J, Son (Eds.). <u>Decision Modeling and Behavior in Uncertain and Complex Environments.</u>) Springer. 2008, 253-276.
- Azen, R., & Budescu, D.V. Applications of multiple regression in psychological research. In R. Millsap, & A. Maydeu Olivares (Eds.) <u>Sage Handbook of Quantitative Methods in Psychology</u>. Sage, 2009, 283-310.
- Budescu, D.V., & Wallsten, T.S. On two complementary approaches to the study of verbal probabilities. In Brun, W., Keren, G., Kirkebøen, G., & Montgomery, H. (Eds) (2011).
   Perspectives on Thinking, Judging, and Decision Making. Oslo: Universitetsforlaget. 36-46.
- Ho, E.H., Budescu, D.V. & Por, H. (2017). Psychological challenges in communicating about climate change and its uncertainties. In <u>Oxford Encyclopedia of Climate Change</u> <u>Communication</u>. DOI: 10.1093/acrefore/9780190228620.013.381
- **26.** Benjamin, D.M. & Budescu, D.V. (2019). The role of type and source of uncertainty on the processing of climate model projections. In D.R.Mandel, G.Navarrete, N. Dieckmann & J.D. Nelson (Eds.) Judgment and Decision Making Under Uncertainty: Descriptive, normative and

- prescriptive perspectives. Published in Frontiers in Psychology. Pp 110-126.
- 27. Himmelstein, M., Budescu, D.V., Han, Y. (2023). The wisdom of timely crowds. In: Seifert, M. (eds) Judgment in Predictive Analytics. International Series in Operations Research & Management Science, vol 343. Springer, Cham. https://doi.org/10.1007/978-3-031-30085-1 8
- 28. Collins, R.N., Mandel, D.R. & Budescu, D.V. Performance-weighted aggregation: Ferreting out wisdom within the crowd. In: Seifert, M. (eds) Judgment in Predictive Analytics. International Series in Operations Research & Management Science, vol 343. Springer, Cham.
- 29. Broomell, S.B., Ho. E.H., Benjamin, D. & Budescu, D.V. Expert judgment and communication of uncertainty. Chapter prepared for the book *Uncertainty in Climate Change Research: An Integrated Approach*. Edited by: L.M. Mearns, C. Forest, H. Fowler, R. Lempert and R. Wilby, Springer.

30.

# **Refereed Conference Proceedings**

- 1. Budescu, D.V., Crouch, B., & Morera, O. (1996). A multi-criteria comparison of response scales and scaling methods in the AHP. <u>Proceedings of the Fourth International Symposium on the AHP</u>. Faculty of Business Administration, Simon Fraser University, Burnaby, BC. 280-291.
- 2. Rantilla, A.K., & Budescu, D.V. 9(1998). Aggregation of expert opinions. <u>Proceedings of the 32<sup>nd</sup> Annual Hawai International Conference on Systems Sciences.</u>
- 3. Kramer, K.M., & Budescu, D.V. Modelling Ellsberg's paradox in the vague-vague case. (1999). In G. deCooman, F.O Cozman, S. Moral and P. Walley (Eds.) <u>Proceedings of the First International Symposium on Imprecise Probabilities and their Applications (ISIPTA).</u> Universiteit Ghent, 249-257.
- 4. Karelitz, T.M., Dhami, M.K., Budescu, D.V., & Wallsten, T.S. (2002). Toward a Universal Translator of Verbal Probabilities. <u>In Proceedings of the 15'th International Florida Artificial Intelligence Research Society (FLAIRS) Conference</u>. AAAI Press, 298-503.
- Budescu. D.V., & Karelitz, T.M. (2003). Inter-personal communication of precise and imprecise subjective probabilities. In J.M. Bernard, T. Seidenfeld, & M. Zaffalon (Eds.) <u>Proceedings of the</u> <u>Third International Symposium on Imprecise Probabilities and their Applications (ISIPTA' 03).</u> Carleton Scientific, 91-105.
- 6. Smithson, M., Budescu, D.V., Broomell, S.B., & Por, H, (2011). Never say "Not": Impact of negative wording in probability phrases on imprecise probability judgments. In F. Coolen, G. de Cooman, T. Fetz, & M. Oberguggenberger (Eds.) Proceedings of the Seventh International Symposium on Imprecise Probabilities and their Applications, Innsbruck, Austria, 327-334.
- 7. Warnaar, D. B., Merkle, E. C., Steyvers, M., Wallsten, T. S., Stone, E. R., Budescu, D. V., Yates, J. F., Sieck, W. R., Arkes, H. R., Argenta, C. F., Shin, Y., & Carter, J. N. (2012). The aggregative contingent estimation system: Selecting, rewarding, and training experts in a wisdom of crowds approach to forecasting. <a href="Proceedings of the 2012 Association for the Advancement of Artificial Intelligence Spring Symposium Series.">Proceedings of the 2012 Association for the Advancement of Artificial Intelligence Spring Symposium Series.</a>
- **8.** Bo, Y. Lewis, C. & Budescu, D.V. (2014). An option-based partial credit item response model. In Milsap, R.E., Bolt, D.E., van der Ark, L.A& Wang, W-C (Eds.) <u>Quantitative Psychology Research: Springer Proceedings in Mathematics and Statistics</u>, <u>89</u>, 45-72.
- 9. Morstatter, F., Galstyan, A., Satyukov, G., Benjamin, D., Abeliuk, A., Mirtaheri, M., Hossain, T., Szekely, P., Ferrara, E., Matsui, A., Steyvers, M., Bennet, S., Budescu, D.V., Himmelstein, M., Ward, M., Beger, A., Catasta, M., Sosic, R., Leskovec, J. Atanasov, P., Joseph, R., Sethi, R. & Abbas, A. (2019, August). SAGE: a hybrid geopolitical event forecasting system. In <a href="Proceedings of the 28th International Joint Conference on Artificial Intelligence">Proceedings of the 28th International Joint Conference on Artificial Intelligence</a> (pp. 6557-6559). AAAI Press.

## **Book Reviews**

1. Budescu, D.V. (1990).Review of "Analyzing Decision Making: Metric Conjoint Analysis". By J.J. Louviere. Applied Psychological Measurement, 14, 103-105.

- 2. Wasserman, S. & Budescu, D.V. (1994). Review of "A Handbook for Data Analysis in the Behavioral Sciences. Vol I: Statistical Issues and Vol II: Methodological Issues". Edited by G. Keren and C. Lewis. Journal of the American Statistical Association, 89, 715-717.
- 3. Budescu, D.V. & Wallsten, T.S. (1995). Review of "Communicating Quantities: A Psychological Perspective" By L.M. Moxey and A.J. Sanford. <u>Chance</u>, <u>8</u>, 38-40.
- 4. Budescu, D.V. (1996). Review of "Subjective Probability" Edited by G. Wright and P. Ayton. Journal of the American Statistical Association, 91, 1753-1754.
- 5. Budescu, D.V. (2005). Review of "Preference, beliefs and similarity: Selected writings by Amos Tversky" Edited by E. Shafir. <u>The European Association of Decision Making Bulletin.</u> Spring 2005.

## **Technical Reports**

- 1. Budescu, D.V. & Wallsten, T.S. A note on monotonic transformations in the context of functional measurement and analysis of variance, Bulletin of the Psychonomic Society, 1979, 14, 307-310.
- 2. Budescu, D.V. Differential weighting of multiple-choice items. <u>Educational Testing Service</u>, <u>Research Report 79-19</u>, Princeton, N.J., December 1979.
- 3. Kalsbeek, W.D., Mendoza, O.M. & Budescu, D.V. A new cost model for optimum allocation in two-stage sampling. <a href="Proceedings of the American Statistical Association Section on Survey Research Methods">Proceedings of the American Statistical Association Section on Survey Research Methods</a>, 1981.
- 4. Williams, R.L., Budescu, D.V. & Chromy, J. NAEP Year-11 design efficiency study. (RTI/1969/01-01 F) Research Triangle Institute, RTP NC, October 1981.
- Budescu, D.V., Zwick, R., & Rapoport, A. A comparison of the analytic hierarchy process and the geometric mean procedure for ratio scaling. <u>The L.L. Thurstone Psychometric Laboratory Report</u> <u>No. 172</u>, Chapel Hill, NC 1985.
- 6. Budescu, D.V. & Betzer, R.E. Lexical and figurative negation of probability words in Hebrew. <u>IIPDM Report No. 41</u>, Haifa, 1987.
- 7. Wallsten, T.S., Budescu, D.V., Zwick, R. & Kemp, S.M. Preferences and reasons for communicating probabilistic information in verbal or numerical terms. <u>Bulletin of the</u> Psychonomic Society, 1993, 31, 135-138.
- 8. Almagor, M., Budescu. D.V., Nevo, B., & Montag, I. MMPI 2: A Hebrew translation report. <u>University of Haifa</u>, May 1993.

# Selected and Invited Presentations at Professional Meetings (Presenter's name is bolded)

- Wallsten, T.S. & Budescu, D.V. Understanding and using linguistic probabilities. Presented at *special symposium* at the J/DM Society meeting. New Orleans, November 1986.
- **Bar-Hillel, M.** & Budescu, D.V. The elusive wishful thinking effect. Presented at *special symposium* at the 33rd annual meeting of the Psychonomic Society, St. Louis MO, November 1992.
- Budescu, D.V. Representation of verbally expressed uncertainty: Implications of empirical
  psychological research for expert systems. *Invited presentation* at the Workshop on "Qualitative
  approaches to uncertainty and decision" at SPUDM 14, Aix en Provence, France, August 1993.
- Wallsten, T.S., Budescu, D.V. & Tsao, C.J. Combining linguistic probabilities. *Invited presentation* at the International Symposium on "Qualitative aspects of decision making", Regensburg, Germany, July 1994.
- **Budescu**, **D.V.** Methodological problems and traps when comparing precise and vague probabilities. *Invited presentation* at the StAR project workshop. London, June 1995.
- Kuhn, K. & Budescu, D.V. The relative importance of probabilities, outcomes and vagueness in hazard risk decisions. Presented at the *special seminar* on Risk, Uncertainty and Choice, University College, London, June 1995.
- **Budescu**, **D.V**., Erev, I., Wallsten, T.S. & Au, W. On the importance of random error in the study of probability judgment. Presented at *special symposium* at SPUDM 15, Jerusalem, August 1995.
- Wallsten, T.S., Budescu, D.V., Erev, I & Diederich, A. Combining probability forecasts: Overconfident judges can be collectively diagnostic. Presented at *special symposium* at SPUDM 15, Jerusalem, August 1995.
- **Suleiman, R.** & Budescu, D.V. Common pool dilemmas with incomplete information. *Invited presentation* at the workshop on "Games and Human Behavior", Chapel Hill, NC., August 1996.
- **Budescu**, **D.V.** & Olson, M. Patterns of preferences for numerical and verbal probabilities. *Invited presentation* at the INFORMS meeting, San Diego, CA.., May 1997.
- **Budescu, D.V**. & Crouch, B.D. Measures of inconsistency for ratio judgment matrices. *Invited presentation* at the INFORMS meeting, San Diego, CA., May 1997.
- Budescu, D.V., & Johnson, T.R. Using Item Response Theory (IRT) to study judgments of subjective probability. *Invited* presentation at the Distinguished Fellows Panel at the Annual meeting of the American Psychological Society (APS), Washington DC, May 1997.
- **Budescu, D.V.** *Invited* discussant at the Conference of Experimental Economics Research on Bargaining and Learning. Washington University, St Louis, MO, April 1998.
- **Budescu, D.V.,** Kuhn, K.M., & Kramer. K.M. Modeling the effects of vagueness on risky decisions. *Invited* presentation at the 4<sup>th</sup> Annual French Meeting of Experimental Economics. May 1998, Paris.
- **Budescu**, **D.V.**, Johnson, T., & Wallsten, T.S. Averaging probability judgments: Monte Carlo tests of the importance of pair-wise independence. *Invited* presentation at the International INFORMS meeting, July 1998. Tel-Aviv.
- Wallsten, T.S., Dietz, C., & Budescu, D.V. Averaging probability judgments: Tests of the applicability of a theorem to real data. *Invited* presentation at the International INFORMS meeting, July 1998. Tel-Aviv.
- **Budescu, D.V** Ellsberg re-visited: Modeling the effects of vagueness on risky choices. *Invited* presentation at the International INFORMS meeting, July 1998. Tel-Aviv.
- **Budescu**, **D.V**. Aggregating probabilistic opinions and forecasts. *Presidential address* at the annual meeting of the Society of Judgment and Decision Making, Orlando, Fl, 2001.
- **Budescu, D.V.**, Rantilla, A.K., Karelitz, T.M. & Yu, H. Confidence in aggregation of opinions from multiple sources. *Invited presentation* at the meeting on "Information sampling as a key to understanding adaptive cognition in uncertain environments", Heidelberg, Germany, May 2002.
- **Budescu D. V**. Effects of shared information on the aggregation of multiple probabilistic forecasts. *Invited presentation* at the "Diversity theme workshop" organized by the Center for Software Reliability (CSR) at City University London, May 2002.
- **Budescu D. V**. On the judgment, aggregation of and confidence in probabilistic opinions. *Invited presentation* at the 10th anniversary of the Center for the Study of Rationality at the Hebrew University, Jerusalem, June 2002.

- **Gustafsson, M.** & Budescu, D.V. Cooperation in Give- or Take Some (GOTS) games. *Invited* presentation at the 28th International Congress of Psychology (ICP2004), August 2004, Beijing, China.
- **Budescu, D.V.**, & Maciejovsky, B. The effects of monetary feedback and information spillovers on cognitive errors: Evidence from competitive markets. *Invited* presentation at the conference "People and Money: The human factor in financial decision-making" DePaul University, Chicago, IL, January 2005.
- **Budescu**, **D.V**., & Maciejovsky, B. Can competitive markets eliminate cognitive biases. *Invited* presentation at the spring meeting of the Chicago Quantitative Alliance, Las Vegas, NV, April 2005.
- **Budescu**, **D.V**. Determining relative importance through dominance analysis. *Invited* presentation at the Annual Meeting of the Midwestern Psychological Association (MPA). Chicago II, May 2005.
- **Budescu**, **D.V**., & Broomell, S. The effects of presentation format and decision aids on decisions under deep uncertainty. *Invited* presentation at the meeting on Abrupt Climate Change, Aspen Global Change Institute, July 2005.
- **Budescu, D.V.** & Templin, S.E. Valuation of Vague Prospects with Mixed Outcomes. *Invited* presentation at the workshop on Decision Modeling and Behavior in Uncertain and Complex Environments. Tucson, AZ, February 2006.
- **Budescu, D.V.**, & Yu, HY. To Bayes or not to Bayes: A comparison of models of information aggregation. *Invited* presentation at the meeting on "Advice and Trust in Decision Making" at University College London, June 2006.
- **Budescu**, **D.V**., & Yu, HY. To Bayes or not to Bayes: A comparison of models of information aggregation. *Invited* presentation at the meeting on "Affect, Motivation and Decision Making" at Ein Boqeq, Israel, December 2006.
- **Budescu**, **D.V**., & Yu, HY. Aggregation of probabilistic information from correlated sources. *Invited* presentation at the workshop on "Risk Attitudes" Montpellier, France, May 2007.
- **Budescu**, **D.V**., & Yu, HY. A comparison of models of aggregation of probabilistic forecasts. *Invited* presentation at the workshop "Meteorology meets Decision Science: Risk, Forecast and Decision" Exeter, UK, June 2007.
- **Budescu, D.V.**, & Maciejovsky, B. Collective induction without cooperation? Learning and knowledge transfer in cooperative groups and competitive auctions. *Invited* presentation at the preconference on "New directions in group research" at the annual meeting of the Society of Experimental Social Psychology. Chicago, October 2007.
- Budescu, D.V., **Broomell, S.B. & Por, H.H.** How should we communicate uncertainty about climate change to the Public? The case of the IPCC. *Invited* presentation at the workshop on Ecologies of Consumption: Markets, Sustainability, and Consumer Culture. Champaign, Il, April 2008.
- **Budescu,** D.V., Abbas, A., Yu, HT., Haggerty, R., Mulligan, R., & Gu, R. Fixed pie or fixed variable? Comparing methods of elicitation of probability distributions. *Invited* presentation at the INFORMS Conference, Washington DC, October 2008.
- **Abbas, A.,** Budescu, D.V. & Gu, Y. Assessing joint distributions with isoprobability contours. *Invited* presentation at the INFORMS Conference, Washington DC, October 2008.
- Budescu, D.V. A decision theoretical perspective on psychometrics: Analyzing test-taking behavior"
   The Anastasi Lecture. Fordham University, December 2008.
- Budescu, D.V. Judgment and decisions with, and communication of, imprecise information. *Invited presentation* at the Conference on Ambiguity, Uncertainty, and Climate Change. Berkeley, CA, September, 2009.
- **Budescu, D.**V. Abbas, A. Assessing joint distributions with isoprobability contours. *Invited presentation* at the workshop on Risk Perception and Subjective Beliefs" organized by the Center of Economic Analysis of Risk (CEAR) at Georgia State University, Atlanta, October, 2010.
- **Budescu**, D.V., Por, H, & Broomell, S. Effective communication of uncertainty in the IPCC Reports. *Invited presentation* at the International Conference Behavioral Decision Making, Herzliya, Israel, June 2011.
- **Budescu, D.V.** Individual decisions with imprecise probabilities. *Invited presentation* at the James Belfer Memorial Symposium on Decisions Under Severe Uncertainty, The Technion, Haifa Israel, January 2013.

- **Budescu**, D.V. How the public interprets uncertainty communication. Some lessons from the IPCC. *Invited presentation* at Workshop on Weight of Evidence organized by the National Research Council, Washington DC, March 2013.
- **Budescu**, **D.V.** Identifying expertise and using it to extract the Wisdom of the Crowds. *Invited presentation* at Wisdom of Crowds conference at the University of California at Irvine, April 2013.
- **Budescu**, **D.**V. Is there an optimal mode of communicating uncertainty? *Invited presentation* at the Choice Architecture workshop, Columbia University, May 2013, New York.
- **Budescu, D.V.** To rank or not to rank: Psychological and statistical considerations. ? *Invited presentation* at NIH's Center for Scientific Review Symposium on Ranking, Bethesda, Maryland, August 2013.
- **Budescu, D.V.** Communication of uncertainty: Variations on a theme by Baruch Fischhoff. *Invited commentary* at the Sackler Symposium on the Science of Science Communication. National Academy of Science, WDC, September 2013.
- **Budescu**, **D.V**. Revisiting the "wisdom of crowds": New theoretical results and empirical findings. *Invited Presentation* at the meeting of the Australian Mathematical Psychology Society, Canberra, February 2014
- **Budescu.** D.V. Decisions with imprecise probabilities. *The Edwards Lecture* at the Department of Psychology, University of Washington, Seattle, WA March 2014.
- **Budescu**, **D.V.** Revisiting the "wisdom of crowds": New theoretical results and empirical findings. *Invited Presentation* at the University of Maryland Decision Science Field Committee. April 2014,
- Budescu, D.V. The 2012 international study of uncertainty communication in the IPCC assessments.
   Invited Presentation at the Risk and Uncertainty Perception, Modelling and Climate Change Policy Workshop, Bocconi University, Milano, Italy, July 2014.
- **Budescu**, **D**.V. The 2012 international study of uncertainty communication in the IPCC assessments. *Invited Presentation* at the meeting of NATO Exploratory Team on Managing the Communication of Risk and Uncertainty (SAS-ET.CR), Paris France, July 2014.
- **Budescu, D.V.** A psychological perspective on individual decisions on Climate Change. *Invited Presentation* at the Workshop on Decision Analysis for Climate Risk Management, Snowmass, CO, July 2014.
- **Budescu**, **D.V.** A decision theoretical perspective on test-taking behavior. *Invited keynote address* at the Annual meeting of the Israeli Psychometric Society, Jerusalem, Israel, February 2015.
- **Budescu**, **D.V.** Revisiting the "wisdom of crowds": New theoretical results and empirical findings. *Invited Presentation* at the Hubert Retirement Symposium, Urbana, IL, May 2015.
- **Budescu, D.V. & Maciejovsky, B.** Effective communication of imprecise information, *Nickerson Award Lecture*, at the 2015 Annual Convention of the American Psychological Association, Toronto, August 2015.
- **Budescu**, **D.**V. Communicating uncertainty with probability phrases. *Invited keynote address* at the SAS Panel Research Group on Assessment and Communication of Risk and Uncertainty to Support Decisions. Paris France, December 2015.
- **Budescu, DV** Some lessons for effective communication of deep (imprecise) uncertainty. *Invited presentation* at the conference "How can we improve health science communication?" at the Center for Political Science (CPS), Ann Arbor, MI. June 2016.
- **Budescu, D.V.** & Chen, E. Aggregation information by harnessing the wisdom of crowds. *Invited award presentation* at the Exeter Prize 2016 Workshop. Exeter, UK October 2016.
- **Budescu**, **D.V.** & Park, S. Aggregating probability intervals to improve their calibration. *Invited presentation* at the Exeter Prize 2016 Workshop. Exeter, UK October 2016.
- **Budescu**, **D.V.** Using ratio judgments to estimate subjective probability distributions. *Invited presentation* at the "Tribute to Amnon Rapoport" conference at UC Riverside, November 2016.
- **Budescu**, **D.V.** Identifying expertise and the Wisdom of Selected Crowds. *Invited Distinguished Alumnus presentation* at the Department of Psychology at UNC Chapel Hill, March 2017.
- **Budescu, D.**V. Zhang, Y., Chen, E. & Mellers B. Optimal forecasting teams. *Invited presentation* at the 2018 Psychonomic Society Collaborative Symposium "Advances in Information Aggregation and Collective Intelligence Research" Annual Meeting of the Japanese Society for Cognitive Psychology (JSCP) September 2018, Osaka, Japan.

- **B**udescu, D.V., Fan, Y. & Ho, E. Estimating subjective probability distributions to reduce elicitation biases. *Invited presentation* at the Symposium "Current Trends in Mathematical Psychology" at the 2018 Meeting of the Psychonomic Society, New Orleans, LI, November 2018.
- **Budescu, D.V.** The wisdom of forecasting teams. *Invited presentation* at the conference on Deliberation, Belief Aggregation and Epistemic Democracy. Universite de Cergy-Pontoise, Paris, France, June 2019.
- **Budescu, D.V.** The wisdom of forecasting teams. *Invited keynote presentation* at the conference on Bayesian Crowds. Erasmus University, Rotterdam, the Netherlands. June 2019.
- **Budescu, D.V.** The wisdom of forecasting crowds and teams. *Invited keynote presentation* at the workshop on Decision Making in Social Settings organized by the Center for Decision Making and Economic Psychology at Ben Gurion University of the Negev, Israel
- Budescu, D.V. The wisdom of forecasting crowds and teams. A *Invited keynote presentation* at A Meeting of Methodologies (AMOM), June 2020 at at Simon Frasier University BC, CANADA (Presented Remotely)
- **Budescu**, **D.V.** *Invited* discussant at the annual meeting on the Society of Judgment and Decision Making (SJDM). Online, December 2020. .
- Budescu, D.V. Improving probabilistic forecasting. *Invited Presentation* at the Anticipatory
  Intelligence Workshop organized by Defence Research and Development Canada (DRDC). Online,
  September 2021.
- **Budescu**, **D.V.** Adventures in Translational Research: The IARPA Geopolitical Forecasting Tournaments. *Invited presentation* at the webinar of the Decision Analysis Society, September 2022.
- **Budescu, D.V.** Lessons learned about optimal judgmental forecasting from forecasting tournaments. *Invited presentation* at the conference on Behavioral Economics at the Ruppin Academic Center, Israel, January 2023.
- **Budescu**, **D.**V. Harnessing the Wisdom of Crowds: Lessons about judgmental forecasting. *Jefferson Science Fellowship Distinguished Lecture*, *National Academy of Sciences*, January 2023.

## **Teaching Experience**

### Courses taught at the Fordham University (2008 - )

- Models of Choice and Decision
- Multivariate Analysis
- Experimental Design
- Meta Analysis
- Graduate Statistics.
- Categorical Data Analysis

### Courses taught at the University of Illinois (1992 - 2008)

- Introductory Statistics ----- PSYCH 235
- Statistical Methods I ----- PSYCH 306
- Statistical Methods II ----- PSYCH 307
- Models of Choice and Decision ----- PSYCH 434
- Multivariate Analysis ----- PSYCH 494
- Quantitative Models of Decision --- PSYCH 493

## Courses taught at the University of Haifa (1982 - 1991)

- Introductory Statistics (Undergraduate)
- Intermediate Statistics (Graduate)
- Analysis of Variance (Undergraduate and Graduate)
- Multivariate Statistics (Graduate)
- Regression Analysis (Graduate)
- Advanced Seminar in Quantitative Methods (Graduate)
- Statistical and Methodological Consulting (Graduate)
- Test Theory (Graduate)
- Scaling (Graduate)

- Psychological Testing (Undergraduate)
- Behavioral Judgment and Decision (Undergraduate and Graduate)

## Courses taught at Carnegie Mellon University (1988 - 1989)

• Empirical Research Methods

### Courses taught at the Technion (Israel Institute of Technology) (1997)

• Test Theory and Development (Graduate)

#### **Summer Schools**

- Uncertainty in Climate Change. National Center for Atmospheric Research (NCAR), Boulder CO, July 2012 and July 2014
- Uncertainty. Max Plank Institute Jena, Germany, August 2012
- Uncertainty in Climate Change, Venice, Italy, July 2013.
- European Judgment and Decision Making, Bonn, August 2014.

#### List of Graduate Students

## Master of Arts (MA)

November 1985: (University of Haifa) Wendy Weiss

November 1986: (University of Haifa) Shalva Thorn Weinberg

November 1986: (University of Haifa) Ruth Betser

November 1986: (University of Haifa) Amanda Yaffe-Katz

June 1987: (University of Haifa) Orit Nadiv

June 1987: (Hebrew University) Avi Alaloof
November 1987: (University of Haifa) Yuyal La

November 1987: (University of Haifa) Yuval Lachman November 1987: (University of Haifa) Jacqueline Betel January 1988: (University of Haifa) Orit Ben-Shaul June 1988: (University of Haifa) Smadar Ben-Gur November 1991: (University of Haifa) Tzur Shacham October 1992: (University of Haifa) Meira Bruderman November 1992: (University of Haifa) Irit Freeman September 1996: (University of Illinois) Bradley Crouch

June 1996: (University of Illinois) Razia Azen

February 1998 (University of Illinois) Karen Kramer

February 2001 (University of Illinois) Tzur Karelitz

September 2002 (University of Illinois) Jonathen Templin

July 2003 (University of Illinois) Alyssa Mitchell

May 2005(University of Illinois) Hsiu-Ting Yu

November 2006 (University of Illinois) Yan Huo

November 2007 (University of Illinois) Stephen Broomell November 2009 (University of Illinois) James Marcus

November 2009 (University of Illinois) Rola Gu

April 2012 (Fordham University): Yuanchao Bo

November 2012 (Fordham University): Daniel Benjamin

July 2014 (Fordham University): *Saemi Park* July 2014 (Fordham University): *Emily Ho* January 2016 (Fordham University): *Victoria Song* May 2017 (Fordham University): *Yizhi Zhang* 

May 2018 (Fordham University): Mark Himmelstein

August 2018 (Fordham University: *Ying Han* August 2018 (Fordham University: *Kaitlyn Mare* July 2021 (Fordham University): *Yasmin Hussein* 

### Doctor of Philosophy (PhD)

January 1989: (University of Haifa) Ramzi Suleiman (With Professor Amnon Rapoport)

#### David Budescu, PhD

December 1991: (Hebrew University) *Anat Ben-Simon* (With Professor Gershon Ben-Shahar) September 1996: (University of Illinois) *Kristine M. Kuhn* (With Professor Janet Sniezek)

November 1996: (University of Haifa) Ilan Fischer

December 1996: (University of Illinois) Osvaldo F. Morera

April 1997: (University of Illinois) Michael J. Olson

May 2000: (University of Illinois) Adrian K. Rantilla (With Professor James Davis)

June 2000: (University of Illinois) Razia Azen

September 2001 (University of Illinois) Timothy R. Johnson

December 2002: (University of Illinois) Karen Kramer

June 2004 (University of Illinois): *Tzur Karelitz* (With Professor Jeff Douglas) August 2004 (University of Illinois): *Robert Henson* (With Professor Jeff Douglas)

August 2004 (University of Illinois): Wolfgang Viechtbauer November 2006 (University of Illinois): Sara Templin August 2007 (University of Illinois): John Verkulien March 2010 (University of Illinois) Stephen Broomell October 2013 (Fordham University): Han-Hui Por

July 2014 (Fordham University): Yuancaho(Emily) Bo (With Professor Charles Lewis)

August 2015 (Fordham University): *Daniel Benjamin* January 2016 (Fordham University): *Meirav Arieli-Attali* May 2018 (Fordham University): *Liam Duffy* September 2018 (Fordham University): *Yuyu Fan* 

June 2020 (Fordham University): Emily Ho

April 2014 (Fordham University): James Marcus

July 2021 (Fordham University): Yizhi (Roxanne) Zhang

May 2023 (Fordham University): Ying Han

**Appendices** (available upon request): List of presentations at professional meetings